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ABSTRACT
To introduce children (grades 1-3) to the concept of the city and to give them an appreciation for the relationship that exists between the cities men build and the lives they live in them, a multimedia kit has been assembled. The items in the kit allow the child to explore the city from various viewpoints. By comparing their similarities and differences the child can acquire a reasonable image of what a city is and what happens there. The kit includes photographs, films, books, a model city, and a record. There are 17 lesson plans. Each is printed on a separate card and gives detailed information concerning objectives, materials, and procedures. The teacher may choose the number and order of lessons most suitable for the class. Supplementary information includes a map, a poem, and background information about the contents of the kit. A list of suggested additional materials is provided. The guide is prefaced by a short history of the MATCH Box Project. (JY)

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TEACHER'S GUIDE

THE CITY

THE MATCH BOX PROJECT

Meteriels and Activities for Teachers and CHildren

1

The material in this publication was prepared under a contract with the United States Office of Education as authorized under Title VII, Part B, of the National Defense Education Act of 1958.

Please note that this is the guide to the prototype MATCH Box. Since the end of the MATCH Box Project in 1968, this unit has been extensively revised and produced commercially by American Science and Engineering, 20 Overland Street, Boston, Massachusetts 02215. The latest version of the teacher's guide may be ordered directly from the publisher.

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Teacher's Guide to

T H E C I T Y

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PREFACE

In 1909, a group of Boston teachers formed the Science Teachers' Bureau. Its purpose: "...the exchange of ideas and materials among teachers of science. Specimens of birds, flowers, minerals, etc., used in science teaching are to be sent...to the different schools of the city."

In 1913, the Bureau established the Children's Museum, which from the outset loaned materials and exhibits to schools and other organizations. Our present loan program was begun in 1937, and today we have Loan Boxes on over 100 topics. More than 5,000 "loans" are made each year to teachers in 400 Boston area schools.

In June 1964, under a contract with the United States Office of Education, we started the MATCH Box Project. The term "MATCH" stands for Materials and Activities for Teachers and CHildren. A MATCH Box contains materials, equipment, supplies and activities designed as a unit to foster the teaching/learning of specific subjects at the elementary school level.

Oddly enough, the underlying purpose of the MATCH Box Project is not to make MATCH Boxes. Instead, we are trying to find out more about the role that real objects play in the learning process, and to discover principles for combining materials and activities into effective teaching/learning instruments.

These are the first five MATCH Boxes that have been developed: GROUPING BIRDS (grades K-2); THE CITY (grades 1-3); THE ALGONQUINS (grades 3,4); SEEDS (grades 3,4); and A HOUSE OF ANCIENT GREECE (grades 5,6).

In terms of the materials that the Museum has previously made available to schools, the MATCH Boxes are quite new:

> Each one is developed by a team made up of Museum staff members, subject matter specialists and experienced teachers.
>
> Each contains a variety of both materials and activities designed to do individual jobs, but also to "work" together as a unit.
>
> In every box there is a Teacher's Guide, with lesson ideas, background information, ways of preparing for the Box, etc. The Guide serves to organize and activate the three-way encounter between the materials, the teacher and the children.

As part of the development process, both materials and activities are tried out in the schools, modified, tried out again, etc. Prototype boxes are then evaluated more formally in typical classroom situations, and revised prior to regular distribution to the schools.

But if one considers the MATCH Boxes from the point of view of Museum traditions, they aren't new at all. Like the Science Teachers' Bureau that got us started, the MATCH Boxes continue to keep us involved in "...the exchange of ideas and materials among teachers...."

Please let us know at any time what you think about this MATCH Box or any other materials that you receive from the Museum.

Frederick H. Kresse
Project Director
MATCH Box Project

September 1965

ACKNOWLEDGMENTS

The following people worked together as a team to develop the materials and activities in the "City" MATCH Box.

Tunney Lee, City planner, Boston Redevelopment Authority.
Alvin Fleming, Assistant Professor of Film, Boston University.
Barbara White, Museum assistant and teacher, Children's Museum.
Ruth Green, Head of Loan Services, Children's Museum.
Fred Kresse, Director of the MATCH Box Project, Children's Museum.

On behalf of the team we want to thank these people for helping us:

The patient and willing teachers who permitted us to try the Box out in their classrooms, and who, with their children, showed us many ways of improving it: Wilma Foye, Burr School, Newton; Mary Mooney, Agassiz School, Boston; Sally Morris, Oak Hill School, Newton; Katherine Murphy, Tobin School, Boston; Mrs. Madeline Page, Charles River School, Dover; and Mrs. Dorothy Pocknett, David Ellis School, Boston;

Kevin Lynch, Ted Bacon, and Esther Edwards for criticizing the Box on occasions when it needed it badly;

Tunney Lee for his ingenious design of the city model, and Bruce Arcieri for his craftsmanship in giving it form;

Margaret Meyer, for her steady and creative editorial hand.

Photographs in the Picture Pool are by Andreas Feininger, New York; and David Lawlor, Katherine Knowles, Irene Shwachman and Alan King, Boston. Other photographs are from American Airlines, The Boston Globe, The Boston Herald, The Christian Science Mother Church, The City of New York Housing and Redevelopment Board, Consolidated Edison Company of New York, Educational Services, Inc., New York Convention and Visitors Bureau, The Port Authority of New York, and Standard Oil of New Jersey.

We are indebted to Elektra Corporation for permission to reproduce sounds from its records. Fassett Recording Studios, Boston, produced our record of city sounds.

Fred Kresse and Ruth Green (co-leaders)

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I - ABOUT THIS BOX

The City Box is about "cityness." Its purpose is to introduce young children to the concept of city and to give them an appreciation for the relationship that exists between the cities men build and the lives they live in them.

Each of the items in the Box is a rich source of information and ideas about the city. Taken together they form a set of different, yet partially overlapping conceptualizations of city. By exploring the city from these various viewpoints, by comparing their similarities and differences, we believe children will acquire a reasonable image of what a city is and what happens there -- an image that will enable them to make better sense out of other things they see and hear about cities. At the simplest level the image will be physical and descriptive -- what cities look like and sound like. Through carefully structured activities we think it is possible, however, to go beyond mere description and convey some of the "meanings" that a city holds for its people.

Using the aerial photo, the picture pool and the recorded sounds, the children will identify basic elements and aspects of cities and link these to each other in grouping and matching tasks. The films do two things: they add dynamics and they get at the "feeling" of cities. One of our films emphasizes the interaction between physical elements while the other focuses on human relationships in the city. To further get at the meanings of a city, the children will read and create stories about the city, act out a city accident scene, and solve a highway routing problem.

The model is the main item in the Box that the children can manipulate. Though it can be used to "plan" cities, or to copy the neighborhood, or as an introduction to map skills, its main value lies in the opportunity that it affords the children to express what they know and feel and think about cities. Their constructions reflect their conceptions. By observing what they do with the model, the teacher can trace the nature and course of what the children are learning.

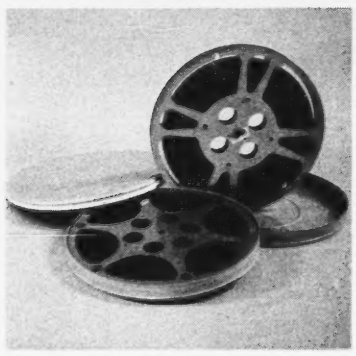
II - THE BOX CONTAINS....

This section will acquaint you with the various items in the CITY BOX. Each is pictured and briefly described. You'll find this section helpful in visualizing the lessons and activities suggested in Section III, and maybe for general lesson planning before the box arrives.

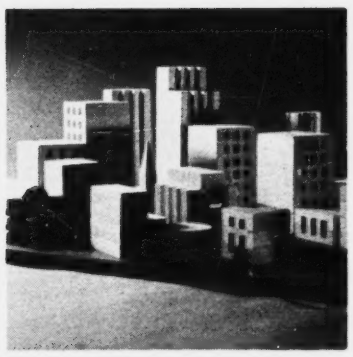
Further facts and background information about items in the box will be found in Section IV. Inside the lid of the box itself, you'll find a complete and detailed checklist of its contents.

Picture Pool: 36 (11" x 14") photographs, mounted on cardboard, showing various aspects of city life.

Aerial Photograph: A large, 40" x 50" view of Boston.



Two - 16mm Films: "THE CITY" - a narrated color film about Chicago. 11 minutes. "PEOPLE OF THE CITY" - a black and white film about Stockholm, Sweden. City sounds. No narration. 16 min.



Magnetic City Model: About 80 wooden, model buildings with magnetic bases.
Metal Chalkboard: with a 2 by 3 ft. surface formed by unfolding the box carrying case.

12" lp Record of City Sounds:
Side A: 10 simple sounds.
Side B: 8 more difficult and complex sounds. Wide bands separate the individual sounds.

Various Trade Books: dealing with city issues and foreign cities.

Note: To make full use of these materials you will need a 16mm sound movie projector, movie screen, a record player, some tackboard space for the aerial photo, and a 3 x 4 foot table (or larger) to set up the city model.

III - USING THE BOX IN THE CLASSROOM

The City Box can be adapted to various teaching styles, subject emphases, grade levels and classroom conditions. The problem for you as teacher--particularly if you are using the Box for the first time--is to choose an approach that suits you and the children in your class.

This section of the Guide has two features that are meant to help you:

1. A series of specific lessons for you to use as they are, or to mix and match with lessons and variations of your own.

2. Some two-week lesson sequences that emphasize different aspects of the topic.

LESSON CARDS

There are 17 individual lessons (A through Q). Each is printed on a separate card and gives detailed information concerning objectives, materials and procedures. The lesson cards are loose and can be taken out of the Guide. This permits you to arrange lessons in any order and to keep a particular lesson card handy while the lesson is going on.

Each lesson card has a code block in the upper right corner which identifies the lesson by its letter, tells about how much time the lesson will take, and indicates whether it is meant for the class as a whole, small groups, or individual children.

The procedure for each lesson is given in steps. Sometimes the timing of a particular step or the pace of the lesson as a whole is important. In these cases the time in minutes is given at the end of each step like this (20).

The lessons do not offer specific ways of evaluating what the children are learning. There are two reasons: One is that we think you will be able to tell how the children are doing just by watching them during the lesson; and the other reason is that we haven't been able to think of any other way of doing it.

This feature of the lessons probably results from our having designed the Box not so much as a tool for getting across certain facts about the city, but more as a device which will evoke ideas about the city which you and the children can deal with as they come up.

LESSON SEQUENCES

One thing is quite clear--all these lessons cannot possibly be done in two weeks. Here are some sequence possibilities, each with its own flavor. (Note: Lesson D does not appear in any of the sequences since it is a filler activity that can be used in various ways. Lessons N and O are generally shown as running concurrently with other lessons.)

Sequence 1: An overall image of the city and a sampler of Box materials and activities.

Sequence 2: The people and dynamics of the city.

Sequence 3: The neighborhood and its relation to the city.

Sequence 4: The physical form of the city and maps.

SEQUENCE	Week 1					Week 2				
	1	2	3	4	5	6	7	8	9	10
1.		A	B + N →	C	E → I F → (H+I) + O →		L	M	Q	
2.	A	B	C + N →	F	G	(H+I)	J or L	M	O → Q or Q → O	
3.	A	B + N →		C	F	J	K + O →	L → M or M → L	Q	
4.	A	B	C + N →	E F	I (H+I) →	P	J M + O →	K	Q	

LESSON CARD LIST FOR "THE CITY"

Lesson	Title
A	Look at the City
B	Streets
C	Intersections
D	Postcards
E	What's Going On?
F	People, People, People
G	The Big Story
H	Little Sounds
I	Big Sounds
J	The Class in the Neighborhood
K	The Neighborhood in the Class
L	Accident
M	Magic Windows
N	Buildings and Streets
O	New City
P	Flatland
Q	Problems, Problems, Problems

40-50 minutes
---
whole class

A

LOOK AT THE CITY

DESCRIPTION

Children see and discuss a film about the city. Then they examine an aerial photograph and learn a game that can be played with it.

OBJECTIVES

To give children an over-all impression of what a city is--to give them a sense of its pace, diversity, scale and complexity.

MATERIALS

From the Box: film, "The City;" aerial photograph; list of items to look for in the "Photo Reader" game.
From the classroom: film projector and screen; space to hang up the aerial photograph.

PROCEDURE

1. Show the film, "The City." The subject of the city and the film may be introduced first, but this isn't necessary. (15)

2. Start a discussion to find out what the children think about the film and about cities. What did they like? What was happening? What were people doing? What did they see in the city? What did they hear? What is a city, anyway?

   You'll learn a lot about the conceptions and misconceptions the children have about cities. As part of the discussion, some teachers start a list of the children's ideas either on the board or on a chart.(15)

3. The way a city looks and feels depends a lot on who you are and where you are. Unroll the aerial photograph, put it up, and ask the children where and who you would be in order for the city to look like this.
   (Note: Hang the photo down low so the children can reach and point to all parts of it. Finger marks will wash off.)

   Have some of the children come up and point things out, or get them to find things that you have spotted. Can they tell what season it is

or the time of day? What does that "UF" stand for on the Prudential Building? (United Fund) (10)

4. At this point you can review and consolidate the lesson by showing the film again, or you can play the "Photo Reader" game. If the projector is hard to reacquire, show the film. The "Photo Reader" game can be introduced at any time.

   "Photo Reader" Game: Present the children with a chalk board list of "hidden" items, which they are to find in the aerial photograph. Those who can find all the items qualify as Aerial Photo Readers.

   This game can be played between periods or during free times, each child going at his own pace. The game may continue for a number of days. If you find yourself swamped by having to check the children's findings, perhaps you can establish "checkers," who have already qualified as Photo Readers, to help you.

   Here are some hidden items to start with:

rooftop clothesline

place to buy doughnuts

billboard

place for a parade

underpass

State House

construction crane

Copley Square Hotel

railroad station

airplane

delivery truck

outdoor music shell

historic monument

freighter at a dock

white church steeple

flag pole

place for entertainment

stoplight

fire escape

turnpike

30-40 minutes
---
whole class

B

STREETS

DESCRIPTION

The children put together picture sequences that express ideas about the city. These picture sequences are called "Streets." The model is also introduced.

OBJECTIVES

To develop the children's own ideas about the city from the relationships they see among groups of pictures. (See Notes on the Picture Pool in Section IV.)

MATERIALS

From the Box: Picture Pool; model and board; poem, "The Blind Men and the Elephant" (See Section IV).
From the classroom: table on which to set up the model.

PROCEDURE

Reminder: Make the city model and magnetic chalk board available early in the unit to give the children a chance to play with these materials before they use them in more structured activities.

1. Pass out the pictures in the Picture Pool. Point out that each one tells something about the city, but that even more can be learned by comparing the pictures. You may want to read John Saxe's poem, "The Blind Men and the Elephant," to emphasize this point. (10)

2. The idea behind "Streets" is to have the children build concepts about the city by getting them to build sequences of pictures that go together. These sequences are referred to as "streets." Streets can have names such as: "Tall buildings," "Lots of people," or "Shopping."

   Here is how to build a street: Have a child come before the class and describe his picture. He might say about #13, "My picture shows lots of people at the beach." Now call for a second child to come up with a picture that he feels goes with the first one.

Have him stand next to the first child and tell about his picture. #14, "My picture shows lots of people too, and buses and trucks." Make the street longer with a third child, who can stand on either side or between the first two children. #17, "This picture shows lots of people and cars too, except it's at night and they are going to the movies." A fourth child: #6, "My picture shows lots of trains that bring the people to the city."

Now ask the class to name the street. Our example has a number of possibilities--"crowds," "people having fun," "city at night," "traffic," "trains"--yet none emerges clearly so there may be difficulty in finding a good name. If this happens you can either make the street longer in hopes that it will become more distinct, or just drop it and try another. When the children agree on the name, write it on the board. Naming the streets can lead to some great discussions.

Collect the first set of pictures, have the children return to their seats, and start building more streets. Keep going until all the pictures and children have been used. Then redistribute the pictures and make more streets. (30-40)

Some Hints:

- Keep the game going. Don't get bogged down trying to name a street that the children don't see yet.

- Streets can be any length provided they are going somewhere. If the children are drifting, start a new street. Some streets are only one child long!

- Let the newest addition to the street place himself anywhere along its length.

- Keep on the lookout for fascinating street names, which reveal a lot about the city and about the children: "Happiness," "City on Fire," "Faces."

- Don't rename streets. If the children call it "Trucks and Buses," don't change it to "Transportation."

20-40 minutes
---
class or group

C

INTERSECTIONS

DESCRIPTION

An extension of Lesson B, "Streets," in which the children formulate a number of interlocking ideas and consider the relationship between them.

OBJECTIVES

To give the children some insight into the interrelatedness of events and conditions in the city.

MATERIALS

From the Box: Picture Pool; picture Stick-Tapes.
In the classroom: chalk rail space, tackboard space.

PROCEDURE

Since this lesson is an extension of Lesson B, it will be helpful if the class has already learned how to play "Streets." This lesson was, however, tried without preparation in a 4th grade class and worked quite well.

1. Pass out the Picture Pool and explain the game. If the class knows how to play "Streets," it will catch on immediately.

   Start by having one child describe his picture to the class placing it on the chalk rail for all to see. Find a child who feels that his picture "goes" with the first one. Ask him to explain the relationship and then to place his picture beside the first one. Keep going until a picture is brought up that doesn't add to the idea - or street - being developed along the rail, but instead suggests a new idea. Place this picture above the one it goes with on the chalk rail, thereby starting a new vertical street intersecting the first one in a common picture.

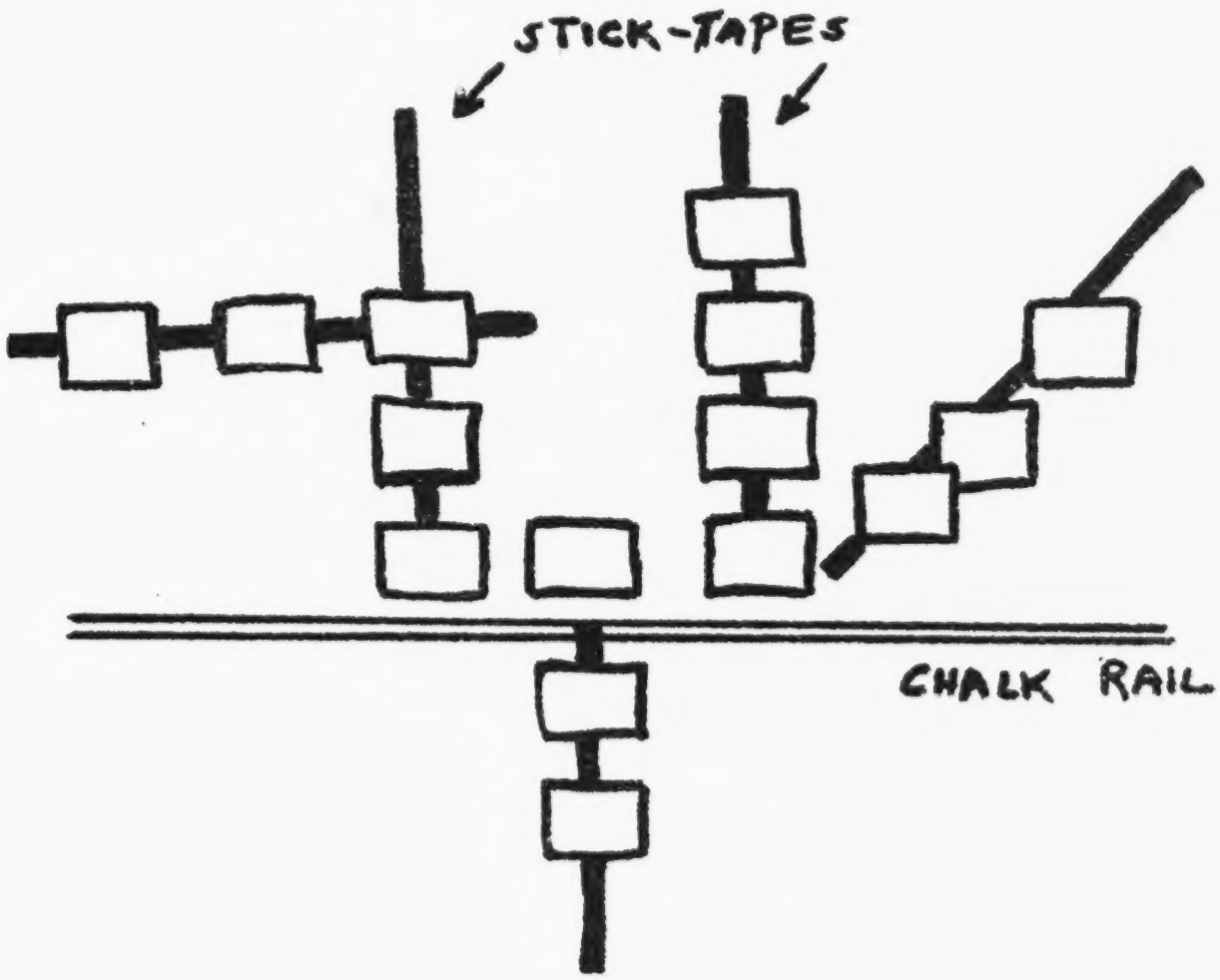
   New streets can be started whenever new concepts emerge. Little by little a rather elaborate pattern of ideas will be formed resembling a crossword puzzle or the game of Scrabble. (See diagram.) By allowing streets to go off at angles more than two streets can be made to meet at a common picture.

Have the children devise names for the streets as they build them. (See Lesson B.) When street development has slowed down, get them to reflect on some of the intersections they have produced. Do they see any relationship between ideas such as "crowds," "tall buildings," "different kinds of neighborhoods" and "museums?"

When discussion begins to wane, collapse the pattern of pictures and start a new one. This lesson can become very tedious if it is pushed too hard.

How to make vertical streets: To develop a street up from the chalk rail, tack a stick-tape to the tack board over the picture at the intersection and stick pictures onto the tape. To go down from the chalk rail, tack the stick-tape to the edge of the rail and let it dangle. For oblique or horizontal streets, tack both ends of the tape across the tack board.

Small groups: With small groups the game can be played by laying the pictures out on the floor.



20-30 minutes
---
class or group

D

POSTCARDS

DESCRIPTION

A game in which the teacher presents sets of picture "postcards," which she has grouped according to some idea; the children try to discover what the idea is.

OBJECTIVE

To enlarge and extend the children's ideas about the city.

MATERIALS

From the Box: Picture Pool, concept list (Section IV).

PROCEDURE

This lesson gives you greater control than either "Streets" (B) or "Intersections" (C) over the ideas that come up in class. You can use it, therefore, to fill in previously untouched topics, to develop interesting ideas, or to explore problems that come up in other lessons.

Once the game has been learned, it is easy to play even for short periods, and the children may be able to play it by themselves.

1. Here is the idea of the game. You are visiting the city and you want to tell the class what it is like, what you've seen, etc. You have no time to write, so you send sets of postcards which tell different things about the city. The children have to find out what idea you are trying to express with each set of postcards you send.

   Postcards are drawn from the Picture Pool. Select a set with a common element or idea and let the children, either as a class or in a smaller group, try to determine what the idea is. When they have discovered what you were trying to tell them with your postcards, send them another set, and so on. Play the game as long as you want. (20-30)

   Some Hints:

   - Have at least two postcards in every set.

- You can vary the difficulty of the game by varying the number of postcard clues in a set, and, of course, by your choice of concept. Another thing you can do is to present the postcards one at a time.

- Hundreds of concepts are possible, so don't be surprised if the children discover an idea in your postcards different from the one you had in mind when you sent them. If this happens and their idea is a good one, give them full credit, and then have them try to find <u>your</u> idea. After all, many things we do and say have double meanings, some intentional and some not.

- Once the children get the idea, let them send postcards to each other.

<u>Note:</u> A number of concept areas have been purposely built into the Picture Pool. These are listed on a separate page in Section IV, and may be helpful in getting the game of "Postcards" started.

40-50 minutes
---
whole class

E

WHAT'S GOING ON?

DESCRIPTION

Children see a movie and discuss what they saw and heard. Then they listen to some sounds which they try to relate to events in the city.

OBJECTIVE

To enlarge the city image by linking sounds and sights and relating these to what's happening in the city.

MATERIALS

From the Box: the film, "People of the City" (18 minutes); record of city sounds.
From the school: 16mm projector and screen; record player - 33 1/3 rpm.

PROCEDURE

1. Show the film, "People of the City." Ask the children to notice particularly what the people are doing and what sounds go along with what they are doing. (15)

2. Start a discussion about the film in general, and then have the children recall what people were doing, who was doing it, and what sounds were heard.

   Record, either on the board or on a chart, what the children report using a table something like this.

What people are doing	Who is doing it?	What sounds were heard?
meeting	man and woman	rain
fishing	old man, boy	band, seagulls, train
helping	boy and blind man	tapping, music
speeding	ambulance drivers	siren
(Be as specific as possible, using action verbs)		(Include sounds produced by the event as well as ones surrounding it.)

In developing this table make sure that the three entries in each row line up with each other to reinforce their relationship. (10-15)

3. Before interest is lost in developing the table, introduce the record of city sounds. Explain that now, instead of seeing things and hearing sounds at the same time, the children will just hear sounds and try to tell what they are and what is happening.

   Play the sounds on Side A of the record, one at a time, and let the children identify and discuss them. As they do, further entries can be made in the table on the board, starting this time with the "sound" column and filling in the other two.

   You might try <u>not giving</u> the children the answer to the sounds they cannot identify correctly. See if their curiosity is aroused enough to listen to the sounds again. (15-20)

Note: The sounds on Side A are listed below. In order to play a particular sound, set the needle down in the wide empty space that precedes the band you want to play. The needle will be carried over by itself to the starting point.

SOUND LIST (Side A)

Band	Sound
1	Introduction
2	school children
3	train and terminal
4	traffic
5	crash
6	zoo: lion house
7	parade
8	subway
9	fire scene
10	construction site
11	symphony and applause

60 minutes
---
whole class

F

PEOPLE, PEOPLE, PEOPLE

DESCRIPTION

The children see a movie. They then discuss the people in the film and what they feel about them. Finally, they watch the movie again.

OBJECTIVE

To focus attention on the variety and interlocking pattern of people's lives in the city.

MATERIALS

From the Box: film, "People of the City" (18 minutes).
From the school: 16mm sound film projector and screen.

PROCEDURE

The emphasis in this lesson is on people; the different kinds there are, what they do, what they like, how the city affects their lives and how they affect each other.

1. Without much introduction show the film, "People of the City" asking the children to pay particular attention to the people, what they are doing, etc. (20)

2. After the film, get a lively discussion going. Draw the children out. Get them to express their feelings and impressions instead of just reporting what they saw. (After all, everyone just saw it.)

   Who were some of the people? How did they come together and what happened when they did? Which ones did they like? Why did the fisherman drop his net? What happened to people when it rained? (20)

3. While the discussion is still interesting, show the film a second time, giving the children a chance to find new things and to confirm or change some of their ideas about people in the city. (20)

Note: This film is worth showing a number of times.

15-30 minutes
---
class or group

G

THE BIG STORY

DESCRIPTION

The class as a whole makes up a story about the city, illustrating it with pictures from the Picture Pool.

OBJECTIVE

To give the children a way of showing what they know and feel about the city, and in the process to make them aware that events occur not only in sequence but also concurrently.

MATERIALS

From the Box: Picture Pool and Stick-Tapes.
In the classroom: chalk rail and tack board space.

PROCEDURE

The procedure in this lesson is very similar to that used in "Intersections" (Lesson C). The class makes up a story illustrated with pictures from the Picture Pool. The main story line is developed along the chalk rail, while concurrent events or sidelights are depicted in vertical picture arrays.

1. Pass out the Picture Pool and explain that everyone is going to help make up a class story about the city.

2. Have one child start the story by bringing up his picture, placing it on the chalk rail, and telling a short story about it. Then have other children come up one at a time, each contributing a bit to the story and adding a picture to the sequence.

   Here is how a Boston class started its story:

   #2 "These ladies are secretaries and it's time to go home."
   #12 "On their way home they took a bus up this street."
   #19 "One lady had a flat on the way home and these men are helping her to fix it."

   So far, the story is tracing the events that followed the opening story,

and the pictures are being added to the right of the first one. Suddenly...

#1 "This tall building here (in the foreground of #12) is a hospital, and this doctor is fixing this baby."

This picture is placed <u>over</u> #12 to show that it is happening at the same place and/or at the same time as the events previously assigned to picture #12.

And so on. From the first picture the story can develop to the right (future events) or to the left (prior events) and up and down from any picture in the chalk rail. Stories get bigger and better with practice. What's fun is to see how big a story the class can make.

Hints:

- For the up and down pictures use the Stick-Tapes. Tack a piece of tape onto the tack board above the chalk rail or into the rail's edge, then press the pictures to the tape. (See Lesson C for details.)

- Be tough on the kids. Don't accept just any addition to the story. Each child's contribution should make sense and be reasonable in terms of the existing pictures or story line.

- Recapitulating the story from time to time helps keep the children on course. It also smooths the story out a bit.

40-50 minutes
---
class or group

H

LITTLE SOUNDS

DESCRIPTION

The children identify a set of sounds and relate them to places and events in the city. Later they make up a story incorporating the sounds.

OBJECTIVE

To establish associations between city sounds, places and events.

MATERIALS

From the Box: record; Picture Pool; aerial photo; model.
From the school: record player, 33 1/3 rpm.

PROCEDURE

At the outset, display the aerial photograph and some or all of the Picture Pool. It is also useful to have the model set up on a table.

1. Using Side A of the record, play the sounds one at a time and have the class identify them. (If the class has already done Lesson E, the sounds will be familiar and emphasis can be placed on the next step.)

   After each sound, have the children associate it with places and events in the city by using one or all of the following:

   Picture Pool: Ask the child who has just identified a sound to choose a picture in which the sound might be heard. (Sometimes the sound is "in" the picture and sometimes it is "nearby.")
   aerial photograph: Ask the child to point out where in the city the sound might be heard. This may be a specific place or an area. Some sounds could be heard anywhere, but not necessarily at any time.
   model: Either by pointing to or holding up a building, let one of the children show where the sound would be heard. (This will probably only work if the children have already been building cities with the model.) (20-30)

2. When the class has identified all the sounds, have the children

develop a story about them. Each child can write his own; or the class as a whole can make up the story--perhaps by using the "Big Story" technique described in Lesson G. The idea is to get children to link, in a plausible way, as many of the sounds as they can. The order in which the sounds occur in the story is unimportant, and certainly does not have to follow the order in which the sounds were heard. (20)

Hint: You may want to play the record again or make a list of the sounds on the board to help the children recall them.

Note: The sounds on Side A are listed below. Starting with children in a school yard, they end with an evening at the symphony and so lend themselves to a story about a class trip to the city. Hopefully, the children will invent more exciting stories, but if they have trouble, this idea will get them started.

To play a particular sound, set the needle down anywhere in the wide empty space that precedes the band you want to play. The needle will be carried over to the starting point.

SOUND LIST (Side A)

Band	Sound
1	Introduction
2	school children
3	train and terminal
4	traffic
5	crash
6	zoo: lion house
7	parade
8	subway
9	fire scene
10	construction site
11	symphony and applause

40 minutes
---
class or group

I

BIG SOUNDS

DESCRIPTION

The children listen to some rich and fascinating sounds which they then try to analyze and interpret in a discussion led by the teacher. Then each child chooses a sound and draws a picture of it.

OBJECTIVE

To expose the children to some unusual sounds and to show them that sounds have meanings--meanings that they can uncover.

MATERIALS

From the Box: record, Side B.
From the classroom: record player, 33 1/3 rpm; drawing materials.

PROCEDURE

1. Play the sounds on Side B of the record one at a time, and after each one talk about it with the children. In the discussion, establish yourself as a moderator and encourage exchange among the children. Help them identify the sound and explore some of its details. Ask them how the sounds make them feel and how the sounds remind them of things in their own lives. Here are some questions that might be raised:

#14, Gondoliers: What are the singers singing about? Are they moving or staying in one place? What is the language? The country?

#16, Noon bells, Venice: What time is it? How many different bells can be heard? Why don't they start ringing at the same time? Is time a matter of opinion? Which one is "right?"

#18, Bullfight: What are the different moods of the crowd? What is happening in the ring? Is bullfighting right?

Hints:

- Don't let the lesson to be learned from a sound, overshadow the fun of just listening to it.

- Don't hesitate to repeat individual sounds or to replay all of Side B.

2. Now ask each child to choose one of the sounds and to draw a picture either <u>of</u> it, or <u>about</u> it. It's interesting to note which sounds appeal the most and what sort of details the children include in their pictures.

SOUND LIST (Side B)

Band / Sound

11 Notre Dame Cathedral, Paris

12 horse race

13 Bon Voyage

14 gondoliers singing in Venice
Two gondoliers singing close by; singing stops as their boat goes under bridge; music, voices, and singing fading away in the distance; applause.

15 hospital operating room

16 noon church bells, St. Mark's Square, Venice

17 airport
Four-motor airplane takes off; then a jet takes off.

18 bullfight
Opening trumpet; bull enters; matador makes opening passes with the large cape; another trumpet announces the work with the small cape; crowd applauds dedication of the bull; series of oles; matador is tossed by the bull; crowd screams; matador rises and is applauded; more oles for extraordinary passes; pause, then the matador kills the bull, crowd goes wild; orchestra plays.

40 min.or more
---
whole class

J

THE CLASS IN THE NEIGHBORHOOD

DESCRIPTION

The class goes on a walking tour to survey the school neighborhood.

OBJECTIVE

To focus attention on a real and familiar place, which the children can use as a common referent as they think and learn about the city.

MATERIALS

<u>You may want to provide</u>: a camera to document the tour. A Polaroid camera would be especially useful.

SPECIAL ARRANGEMENTS

It will be helpful if some room mothers or fellow teachers can be found to go along.

PROCEDURE

The procedure for this lesson is straight-forward: take the class on a tour of the school neighborhood. Here are some things to consider in planning the trip.

1. <u>The school neighborhood:</u> Almost any neighborhood will lend itself to this lesson--whether it is in the heart of the city, the suburbs, or even in the country. All neighborhoods have their own unique characteristics. The trip should be used to bring these out so that comparisons can be made to various kinds of city neighborhoods.

2. <u>Know the neighborhood yourself:</u> Some advanced scouting will enable you to plan and time the trip. Take note of special neighborhood features, perhaps even arrange to stop in at an office, or shop, or house. In addition to the physical features of the neighborhood, note also what is going on so that you can later help the children become aware of the life of the neighborhood. In suburban school neighborhoods very little may be going on,which says a lot about the suburbs and their relation to the city.

3. Before the walk: Sometime before the day of the tour, try to find out what impressions and information the children already have about the neighborhood. Outline these on a chart which can be added to or modified after the trip, thereby giving the children a chance to "see" what they've found out about the neighborhood.

   If you can muster some assistants, try to get them together so you can explain the purpose of the trip and what you'd like them to do.

   You may want to give each child a specific assignment: to determine the address of a particular building, to list the kinds of stores or types of work people are doing, to count the number of dogs. Let the children decide for themselves what they want to find out about the neighborhood. These assignments may be given to groups or to individual children.

4. On the walk: Help the children gather their data; let them assist in taking pictures and suggesting the shots. Have a good time.

5. After the walk: As soon after the trip as possible, try to pull things together in a class discussion in which children report and compare what they found, they ask each other questions, look at the pictures that were taken, etc.

   Try to get them, then, to piece together an over-all description and impression of the neighborhood. In other words, have them reach some conclusions. In doing this you may want to refer back to and develop the chart that was started earlier.

30 minutes
---
class or group

K

THE NEIGHBORHOOD IN THE CLASS

DESCRIPTION

Using the model, the children "build" the school neighborhood.

OBJECTIVE

To invest the model with meaning by showing how it can stand for a real place.

MATERIALS

From the Box: city model and board; removable labels for buildings; aerial photo for reference.
From the classroom: table to set up the model; chalk; pictures and lists of information gathered in Lesson J.

PROCEDURE

This lesson is a follow-up to Lesson J, in which the class makes a walking tour of the neighborhood. This lesson can also be done by itself. In this case you and the children have to rely more on memory of the neighborhood. In either event, it will be useful if the children have already become acquainted with the model. (See Lessons B, N, and O.)

1. First list some of the things that are in the school area--streets, stores, houses, empty lots, factories, churches, etc.

2. Tilt the model board up in front of the class and have the children build the neighborhood, referring to their list and filling in missing items as they go. Call on different children to put in buildings or streets or other elements, and let the class watch to make sure it agrees.

   Usually model buildings can be found to adequately represent the ones in the neighborhood. To specifically identify a building, write its name on a small white label and stick the label to the building.

   Streets, rivers, ponds, and other features can be drawn in with chalk.

In general, let the children do as much as they can. Permit them to make mistakes. These will show up later as inconsistencies in the model which will have to be resolved.

3. Before enthusiasm runs out, spend some time drawing out relationships. Using the aerial photograph, see whether the children can find an area that is comparable in type or size to their school neighborhood. The Picture Pool can be used to show the children other kinds of neighborhoods and to give them a sense of their variety.

Note: This lesson can also be done with a small group of children. While the group builds the neighborhood, the rest of the class can use the Picture Pool to play games learned in earlier lessons: "Streets" (B), "Intersections" (C) or "Postcards" (D). When the model builders have finished they can tilt the model up before the class and describe what they have done. The class can then help with missing parts.

EVALUATION

The model, while it is being built and when it is finished is an expression of the children's conception of their immediate surroundings. It is fun to watch this conception emerge and to note its characteristics.

40-50 minutes
---
whole class

L

ACCIDENT

DESCRIPTION

The children stage an accident, identifying and playing the roles of the people who would be involved.

OBJECTIVE

To give the children some sense of the many specialized roles played by people in the city; and how, because of this, they are highly dependent on each other.

MATERIALS

From the Box: for reference, the Picture Pool and aerial photograph.
From the classroom: name card blanks, pins, and marking pen.

PROCEDURE

The success of this activity depends very much on allowing time to repeat it at least two, and preferably three times during the period. For this reason, the pace of the lesson is quite important.

1. Tell the children a short story about an accident: how it occurred; where it happened; and who was hurt. A picture from the Picture Pool might be used to establish the scene. If possible, build on an idea that may have come up in an earlier lesson. Here are some ideas: old Mrs. Haggarty falls down the stairs in a department store; Mr. Lindstrom is in an automobile accident on his way to work; Mary Pasquali cuts her foot badly on a broken bottle at the beach.

   Have the children identify some of the people who would become involved, such as a lifeguard, policeman, clerk, pedestrian, Mrs. Pasquali, Mr. Lindstrom's boss, etc. As a child thinks of someone, write the name on a large name card and pin it on the child and have him take his place on stage.

   Hint: Do not take time at this point to assign roles to all children. Teachers trying this for the first time have become bogged down at this point and have lost the class's interest. (10)

2. When about six players have been assembled, ask them to act out the accident and the events that would follow. The class can watch to see what other roles need to be played. (5)

3. Have the class identify other people that would become involved or be affected by the accident. Give name tags to five or six more children, and stage the accident again with these additional players. (10-15)

4. Add more children and run the accident a third time. (10-15)

   Repeating the scene has a number of advantages:

   - It allows silliness to wear off.

   - It permits the children to really grapple with the task, to gain some control over it, and to have the satisfaction of making it good. By having a number of cracks at it, they can embellish their roles, correct goofs, and try out better ideas. They get a chance to make it work. As this happens the play becomes meaningful.

   - Class interest is better maintained by building the situation up gradually, than by taking too much time to set things up at the beginning.

Twist: To find out if the children can generalize the ideas of this lesson, choose a very different setting--use the Picture Pool or aerial photograph--and ask them to tell or act out how things would have been altered if the accident occurred here.

Since this lesson doesn't depend on Box materials, it can be conducted even after the MATCH Box has been returned.

30-40 minutes
---
class or group

M

MAGIC WINDOWS

DESCRIPTION

This is a game in which a "window" is placed over part of the aerial photograph and the children describe what is going on inside.

OBJECTIVES

To give the children a sense of the events that occur in the city: their variety, their simultaneity, and their location.

MATERIALS

From the Box: aerial photograph; 4 "windows;" and Picture Pool for reference.

PROCEDURE

1. At the outset, the aerial photograph should be in a prominent place, low enough for the children to see and touch, and the Picture Pool should be set up in the chalk rail or otherwise displayed.

2. Explain the game: "We're going to look through a window at certain parts of the city to see what is happening."

3. To start the game, place one of the windows on the aerial photograph and while you hold it there have one of the children come up to describe what he sees through the magic window. Try to get the child to "see" beyond the buildings and streets. Get him and the others to describe what is actually happening. For example, a window on the airport terminal might show: lots of people dressed up in their good clothes, carrying suitcases; some are leaving the city, others are arriving from distant places; some people are selling tickets; the pilots are getting ready for the trip; planes are being fueled.

   Now try another window, another spot on the photo and another child.

   Particularly at the outset be prepared to work along with the children. You may have to ask them questions such as:

- What's happening in the basement?
- What does that man do for a living?
- Where is that car headed?
- Why are they here?
- How will this place be different tonight?
- Have these people lived here all their lives?

After the children have the idea, you can back away from the situation somewhat by letting the child that is up pick a window, put it in a new place, and choose the next child to come up.

Note: Two things should be emphasized: (1) What is happening, what people are doing, etc.; and (2) the "reasonableness" of these events. Though the game calls for and allows imagination and interpretation, it becomes pointless if "anything goes." The vision of a dentist pulling teeth at the airport should definitely be disallowed.

4. Once the game is established, have two or three children look through separate windows and describe events taking place in different parts of the city at the same time. Change the time of day and have them describe what they now see through their windows.

intermittent
---
small group

N

BUILDINGS AND STREETS

DESCRIPTION

Small groups of children play with the city model in an unstructured situation; the rest of the class does other things.

OBJECTIVE

To acquaint the children with the model and get them thinking about a city's elements, how they are arranged, and what difference the arrangement makes.

MATERIALS

From the Box: city model and board.
From the classroom: chalk, and a table on which to set up the model.

PROCEDURE

This lesson is very important to the success of Lessons K, O, P, and Q, and should be considered as a prerequisite to them.

The lesson goes on over a few days. It can be done at almost any time of the day and while the class as a whole is involved in another subject entirely. This is not one of the "regular" city lessons and can be done concurrently with any of them.

The main idea is to give all of the children a real chance to mess around with the model, see what it's like, and find out what can be done with it.

1. Make the model and magnetic board available on a table away from the wall so the children can gather around it. Provide some chalk with which streets, ponds and other features can be drawn.

2. Select groups of about 6 children to work with the model at a time. A number of groups can be chosen and set to work at different times during the day.

   Try to give each group at least 20 minutes to play with the model, and more if interest and time permit.

3. Start each group off with a clean board and the buildings scattered around it on the table. Don't set things up in advance, or leave a previous group's model set up.

You don't have to organize things very much. Here's what generally happens. The children first jam the board with buildings and start drawing streets every which way. Soon, however, some elements emerge - a road, a church - about which everyone seems to agree. After this, things begin to organize themselves and the activity acquires its own momentum and direction. In a sense, it's self-organizing.

This is not to say that you won't be needed. The groups will vary tremendously in the amount of guidance they require and in the length of time they can function productively. Sometimes "personality" problems arise. As you look in on a group, you'll be able to tell whether it's getting somewhere, or is drifting, or caught on some snag.

In guiding the groups, help them to clarify their problems and to "see" the implications of what they are doing.

- "Show me how you would get to school from your house."

- "What if your house caught fire, Billy, how would the fire engine get there?"

intermittent
---
group and class

0

NEW CITY

DESCRIPTION

Groups of children use the model to plan and build a brand new city which they then describe and submit to the class for discussion.

OBJECTIVE

To make the children aware that men make and change cities, and that the form of a city determines what life in it will be like.

MATERIALS

From the Box: city model and magnetic board.
From the classroom: chalk, and a table for the model.

PROCEDURE

This lesson resembles and is an extension of Lesson N. It differs in that the group working with the model is given a more structured task, and is later called upon to present its work to the class for discussion.

1. While the rest of the class is doing other things, form a group of about 6 children to work with the model, their task being to plan a brand new city. Pose this problem: "What if you were going to plan a new city right from the beginning? What would you put in it? How would things be arranged? What sort of a city would it be?"

   As the children set to work, make sure they realize that they can build any kind of city, provided it makes sense. Their city can be round, spread out; it can have buildings in clusters, curving roads, perhaps no roads at all. However, if it's a harbor, ships must be able to reach it; if it has roads they must go somewhere; if there are empty spaces they must be accounted for, etc.

   You may have to work closely with the group to help it formulate its ideas and express them with the model. Help it clarify the kinds of questions that will later be raised in the class discussion. (see below).

   Don't forget to give the children chalk to work with so they can plan the entire space and not simply wind up arranging buildings. (15-20)

2. When the new city has been built, prop the magnetic board up in front of the class and get a discussion going between the planners and the other children.

First let the planning group explain its plan. Then let the class ask questions. Frequently the children have excellent and novel ideas, but they may have difficulty expressing them. Act as a moderator in the discussion to help the two groups communicate with each other. The main idea is to bring out what the plan implies about life in the new city.

Here are some points to be raised about the plan:

- What is in the new city?
- How is it arranged? (in terms of buildings, street patterns, open spaces, waterways, etc.)
- What would life in the new city be like?
- What kind of a city is it?
- Does it have a name?
- Would you like to live in it; what part?

20-40 minutes
---
whole class

P

FLATLAND

DESCRIPTION

The teacher demonstrates how the model of the city can be translated into a map of the city. In a similar manner the children make maps of their own.

OBJECTIVE

To teach children something about the relationship between a map and the real world.

MATERIALS

From the Box: city model and magnetic board, aerial photograph.
From the classroom: chalk; drawing paper (12" x 18"); hard pencils.

PROCEDURE

1. Set up the model to depict part of a city. Draw in roads and other features. (Note: If this lesson follows Lesson K, the model of the school neighborhood can be used.)

2. Tilt the board at various angles to show how differently the buildings and streets look from above than from the side. Some of the children may want to come up to take a "people's eye" view of the model by crouching down and looking at it with their eyes on a level with the board.

   As you tip the model back and forth, ask the children to notice and describe how shapes and patterns change. A cylindrical tower becomes a circle, a tall building and a short one both become squares, many buildings become rectangles. Point out that a map is like a picture of a place as seen from above. Refer to the aerial photograph.

3. As the children watch, translate the model into a map by outlining the buildings with chalk and removing them from the board. Do this carefully so the children can see how a tall building in the model becomes merely a square in "flatland." When the map is finished or as it is taking shape, the children can be called upon to devise a

key or legend.

4. Now have the children make maps and devise keys of their own in the same way. Let them take model pieces to their desks and set up groups of buildings on large pieces of paper. (Note: There aren't enough model pieces to go around, so you'll have to permit the children to do some trading among themselves or to borrow pieces from the front of the room returning them after they have been made part of their map.)

   If possible, provide fairly hard pencils for the children to use in outlining the buildings. These will not mark the buildings as much as soft pencils or crayons.

   Once the maps are completed, they can be colored in.

5. Finally, have some of the children describe their maps to the class. Then, by putting buildings back on the map, they can show the place that their map stands for.

20 minutes
+ 30 minutes
---
whole class

Q

PROBLEMS, PROBLEMS, PROBLEMS

DESCRIPTION

On the first day each child takes home a highway routing problem which he is to solve from the point of view of a resident in the affected area. On the second day, the class as a whole tries to arrive at a solution.

OBJECTIVE

To make the children aware of the personal impact of growth and change in the city and give them a sense of the problems involved.

MATERIALS

From the Box: city model and board; maps (40) of Five Corners; large scale layout guide; removable stickers.
From the classroom: table to set up the board.

PROCEDURE

The Problem: A new highway is being constructed. It is complete except for a small section that is to pass through a part of the city called Five Corners. The residents of Five Corners have to decide on the best route for the highway.

1. Day 1: At the outset, have the plot plan of Five Corners drawn in chalk on the model board, and have appropriate buildings in place. (To make the layout, use the layout guide provided. Refer to the small maps for building types, etc.)

   With the model board set up before the class, describe Five Corners, and explain the problem. Let each child then "become" a resident of Five Corners by pointing out on the model where he wants to live and who he wants to be. Attach a sticker with the child's name to the building or plot he has chosen. Then shade in his choice on one of the small maps and give it to him.

   All plots do not have to be assigned, but try to spread the children out on the map. Some children can live or work in the same place, and some may have an interest in two properties such as a house and a store.

Homework: Each child is to work out the best route for the highway from the point of view of the person he has chosen to be. He should draw the route on his map. Encourage the children to get their families to help them plan the route and work out reasons for their choice. (Notice that the maps already have a note to parents explaining the problem and the idea of the lesson.) (20)

2. Day 2: Have the class--as residents of Five Corners--try to reach agreement on a route for the highway.

Individual plans can be presented and shown on the model; plans can be compared in terms of people and businesses affected, neighborhood disruption, highway construction costs, etc.

As moderator, bring out the implications of different plans, clarify choices, and break deadlocks.
- Can we narrow this down to two or three main plans?
- It seems to me that you'll have to choose between the church and the movie.
- What would it be like, John, to have a highway in front of your house?
- How will you make a living, Billy, if your store is torn down?
- Should a building be torn down just because it's old?

Keep the problem at a difficulty level that the children can handle. Try also to keep the class "in" the situation, and headed toward a solution.

Permit unlikely, though possible, solutions involving tunnels, bridges, the moving of buildings or, perhaps, a divided highway.

Do not insist that there be a solution. If an impasse is reached, let it go at that. This is a common outcome of difficult problems, and it can teach the children more than can a simple solution arrived at hastily.

Problems don't always have to be solved "as given." Solutions are sometimes found only by altering the problem itself; by examining basic assumptions. This is a perfectly legitimate outcome of the lesson, and you can anticipate it when questions like this arise: "Well, why does the highway have to come through here anyway?"

IV - BACKGROUND INFORMATION

THE CITY MODEL

The city model was designed by Tunney Lee, a city planner at the Boston Redevelopment Authority. It was made by Bruce Arcieri at the Children's Museum.

A few basic shapes are used throughout the model, and individual buildings were made by combining these shapes in different ways. The model is made of pine, and has been coated to resist finger marks. There are approximately 75 pieces, depicting both old and modern building designs.

The buildings are types and do not have names such as "store," "fire house," "police station," etc. This permits the children to use individual buildings in many different ways. We found in our school tryouts that buildings with permanent names acquired permanent uses. Temporary names can, of course, be assigned to the buildings by using the removable stickers.

The model has not been built to any particular scale. Scale doesn't seem very important to young children and an accurately scaled model would produce some unwieldy size variations. We decided, therefore, to make the buildings a size that children could handle and that would permit a reasonably dense concentration of buildings on the board.

The model is meant to be used repeatedly. Its purpose is defeated if children set it up one way which then becomes precious to them and prevents both them and other children from experimenting with a variety of layouts and plans. It is probably a good idea to start each day with a clean board unless, of course, there is a reason for preserving a particular setup--as in Lesson Q for example.

There are pros and cons for setting the model up near the aerial photograph. It gives the children something to go on, but it frequently causes them to copy it, and may keep them from doing some things on their own.

PICTURE POOL

The fine work of many photographers is represented in the Picture Pool. One third of the pictures are by Andreas Feininger whose picture studies of New York City are well known.

There are 36 pictures in all--enough to pass out to all the children in class. The 11" x 14" size is a compromise arrived at by trying to make the pictures as large as possible without making them too heavy or space-consuming in the Box. At first, some pictures may be difficult for the children to see from a distance, but as they get to know them through repeated encounters, they will be able to recognize them and play games with them even from the back of the room.

Usually pictures for children are simple. These are not. We chose rich and complex pictures for two reasons: (1) Cities themselves are diverse and complex. At a certain level of looking, almost every view of the city is a jumble. The pictures reflect this complexity, this richness of the city; (2) We expect the children to meet the pictures many times while they have the Box in their class. If they are to do this, then there should be something worth seeing and getting to know.

Though there are probably hundreds of categories into which the pictures can be grouped, a few categories or concept areas were built into the pool. These concept categories are listed on a separate page in this section.

RECORD OF CITY SOUNDS

The record was specially prepared for the Box. The sounds were taken from commercial sound effects records produced by Elektra Corporation. The sounds were recorded onto tape, arranged into sequence, numbered and spaced, and finally transferred back again onto a record.

background
---
poem

B

THE BLIND MEN AND THE ELEPHANT

John G. Saxe

It was six men of Indostan
    To learning much inclined,
Who went to see the Elephant
    (Though all of them were blind),
That each by observation
    Might satisfy his mind.

The First approached the Elephant,
    And happening to fall
Against his broad and sturdy side,
    At once began to bawl:
"God bless me! but the Elephant
    Is very like a wall!"

The Second, feeling of the tusk,
    Cried, "Ho! what have we here
So very round and smooth and sharp?
    To me 'tis mighty clear
This wonder of an Elepha[illegible]
    Is very like a spear!"

The Third approached the [illegible]nal,
    And happening to take
The squirming trunk within his hands,
    Thus boldly up and spake:
"I see," quoth he, "the Elephant
    Is very like a snake!"

The Fourth reached out his eager hand,
    And felt about the knee.
"What most this wondrous beast is like
    Is mighty plain," quoth he;
"'Tis clear enough the Elephant
    Is very like a tree!"

The Fifth, who chanced to touch the ear
    Said, "E'en the blindest man
Can tell what this resembles most;
    Deny the fact who can,
This marvel of an Elephant
    Is very like a fan!"

The Sixth no sooner had begun
    About the beast to grope,
Than, seizing on the swinging tail
    That fell within his scope,
"I see," quoth he, "the Elephant
    Is very like a rope!"

And so these men of Indostan
    Disputed loud and long,
Each in his own opinion
    Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!

PICTURE POOL CONCEPT LIST

VARIETY OF BUILDINGS 3 4 8 12 16 22 25 35

VARIETY OF NEIGHBORHOODS 3 11 19 22 31 32 35

WORK 1 2 3 4 20 24 25 26 27 28 30 33 34 36

RECREATION 9 10 13 17 18 21 23 27 32 36

PACE AND RYTHM 7 10 14 15 17 18 21 22 23 32

EXCHANGE OF GOODS 3 7 11 16 24 25

EXCHANGE OF IDEAS 2 17 20 27 29 34 36

PUBLIC SERVICES 1 4 14 20 21 26 28 34

CULTURAL OPPORTUNITIES 9 18 23 33 36

PROBLEMS 5 14 22 26 29 31

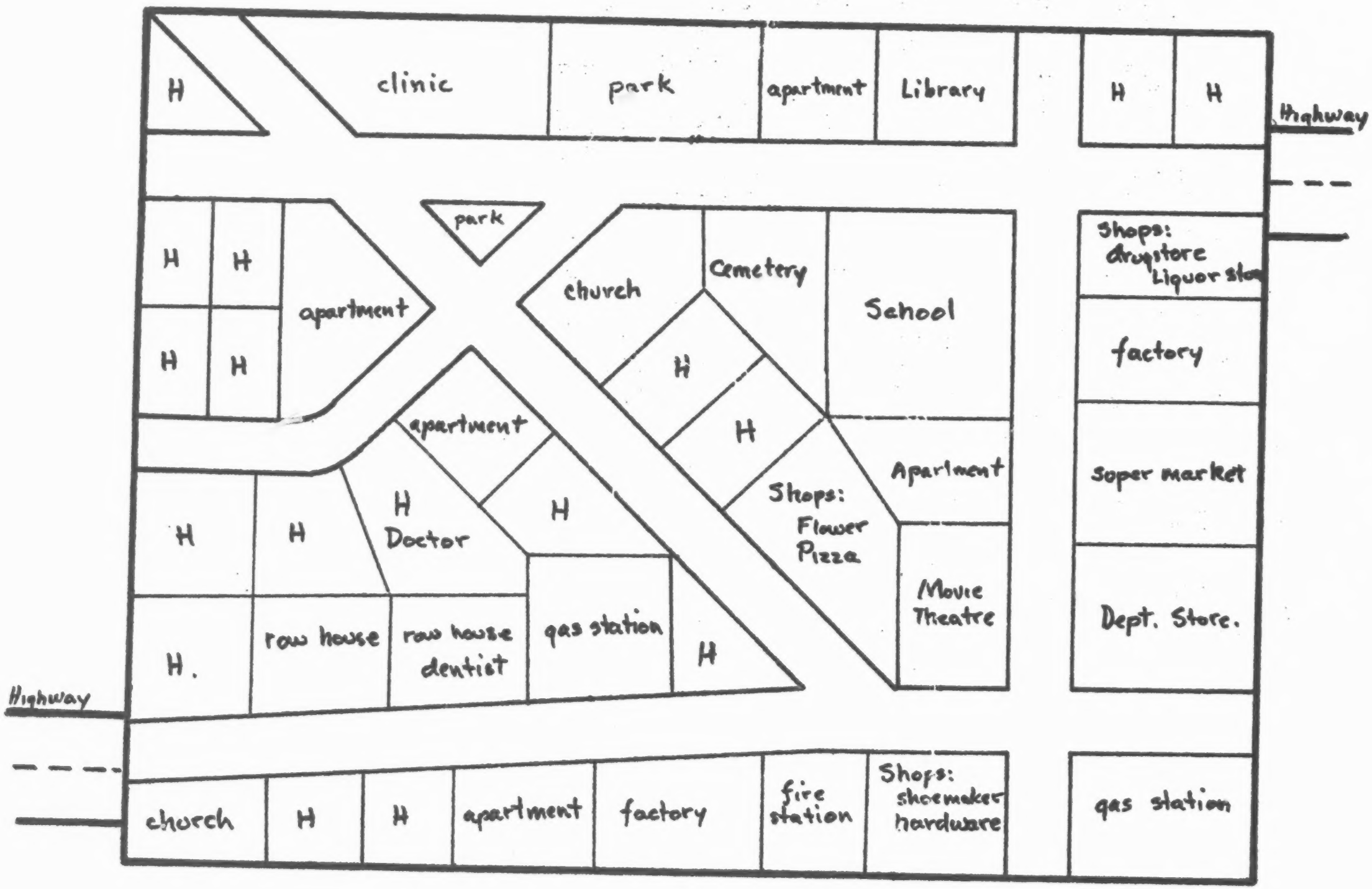
SCALE 2 6 8 12 13 14 35

ETHNIC GROUPS 11 19 29 33 34

INTERDEPENDENCE AND COOPERATION 1 19 20 26 27 29 30 31

THE UNUSUAL 18 24 33

DENSITY 8 13 14 17



Map of Five Corners

FURTHER EXPLORATIONS

The following list consists of additional materials previewed and recommended by members of the Development Team.

Books for teachers on background information about cities:

THE CITY IS THE PEOPLE - Henry Stern Churchill
BEYOND THE MELTING POT - Nathan Glazer, Daniel Moynihan
THE DEATH AND LIFE OF GREAT AMERICAN CITIES - Jane Jacobs
IMAGE OF A CITY - Kevin Lynch
THE CITY IN HISTORY - Lewis Mumford
AMERICAN SKYLINE - Christopher Tunnard, Henry H. Reed

Story Books of second and third grade reading level:

BARTO TAKES THE SUBWAY - Barbara Brenner
KATY AND THE BIG SNOW - Virginia Burton
PETER'S BROWNSTONE HOUSE - Hila Colman
VERONICA - Roger Duvoisin
THE SKYSCRAPER - Liang-Yen
THE HORSE WHO LIVED UPSTAIRS - Phyllis McGinley
TRAVELS OF MARCO - Jean Merrill
THE TWO REDS - Will and Nicole Mordvinoff

Children's Books about foreign cities:

MAIN STREETS OF SOUTHEAST ASIA - Hall Buell
KAI MING, BOY OF HONGKONG - Dominique Darbois
CHILDREN IN THE BIG CITY - Adrian Morrieu, Oscar Van Alphen
THIS IS PARIS, THIS IS ROME, THIS IS LONDON,
THIS IS EDINBURGH, THIS IS MUNICH - Miroslav Sasek

Children's Books for information about cities:

NIGHT PEOPLE - C.B. Colby
TEAR DOWN TO BUILD UP, THE STORY OF BUILDING
AND WRECKING - Jean Colby
ABOUT PEOPLE WHO RUN YOUR CITY - Newman and Sherman
A MAP IS A PICTURE - Barbara Rinkoff
LET'S LOOK UNDER THE CITY - Herman and Nina Schneider

Films:

WHAT IS A CITY?
Bailey Films, Inc., 6509 DeLongpre Ave., Hollywood 28, California
THE CHANGING CITY
Churchill Films, 6671 Sunset Blvd., Los Angeles 28, California
TUGBOATS AND HARBORS
Churchill Films, 6671 Sunset Blvd., Los Angeles 28, California